

**AMENDMENT TO THE CLAIMS**

1. (Currently Amended) ~~Method of judging the onset of~~ A method of diagnosing periodontitis, comprising :

~~detection or measurement of  $\gamma$ -glutamyltranspeptidase contained in gingival crevicular fluid~~

testing gingival crevicular fluid for the presence of  $\gamma$ -glutamyltranspeptidase;  
wherein detection of  $\gamma$ -glutamyltranspeptidase is indicative of a patient with periodontitis.

2. (Currently Amended) ~~Method of judging the onset of~~ A method of diagnosing peri-implant inflammation, comprising :

~~detection or measurement of  $\gamma$ -glutamyltranspeptidase contained in the blood collected around the buried implant~~

testing blood collected around an implant whose base is buried in the periodontium for the presence of  $\gamma$ -glutamyltranspeptidase;

wherein detection of  $\gamma$ -glutamyltranspeptidase is indicative of a patient with peri-implant inflammation.

3. (New) The method of claim 1, wherein said gingival crevicular fluid is collected before being tested.

4. (New) The method of claim 2, wherein said blood is collected before being tested.

5. (New) The method of claim 3, wherein said gingival crevicular fluid is collected by soaking fluid into a paper point, using a sucker or micropipette (capillary), and/or by washing the gingival crevice with a buffer.

6. (New) The method of claim 4, wherein said blood is collected before being tested by soaking fluid into a paper point, using a sucker or micropipette (capillary), and/or by washing the gingival crevice with a buffer.

7. (New) The method of claim 5, wherein said testing is conducted by measuring  $\gamma$ -glutamyltranspeptidase activity.

8. (New) The method of claim 6, wherein said testing is conducted by measuring  $\gamma$ -glutamyltranspeptidase activity.

9. (New) The method of claim 5, wherein said testing is conducted by measuring  $\gamma$ -glutamyltranspeptidase mRNA expression.

10. (New) The method of claim 6, wherein said testing is conducted by measuring  $\gamma$ -glutamyltranspeptidase mRNA expression.

11. (New) The method of claim 5, wherein said testing is conducted by contacting with an antibody specific for  $\gamma$ -glutamyltranspeptidase.

12. (New) The method of claim 6, wherein said testing is conducted by contacting with an antibody specific for  $\gamma$ -glutamyltranspeptidase.

13. (New) The method of claim 3, wherein said patient does not have periodontal inflammation.

14. (New) The method of claim 3, wherein said patient does not have periodontal inflammation but has a deep periodontal pocket.

15. (New) The method of claim 3, wherein said patient has gingivitis.

16. (New) The method of claim 15, wherein a positive test for  $\gamma$ -glutamyltranspeptidase indicates that said patient also has periodontitis.

17. (New) The method of claim 4, wherein said patient does not have periodontal inflammation.

18. (New) The method of claim 4, wherein said patient does not have periodontal inflammation but has a deep periodontal pocket.

19. (New) The method of claim 4, wherein said patient has gingivitis.

20. (New) The method of claim 19, wherein a positive test for  $\gamma$ -glutamyltranspeptidase indicates that said patient also has periodontitis.